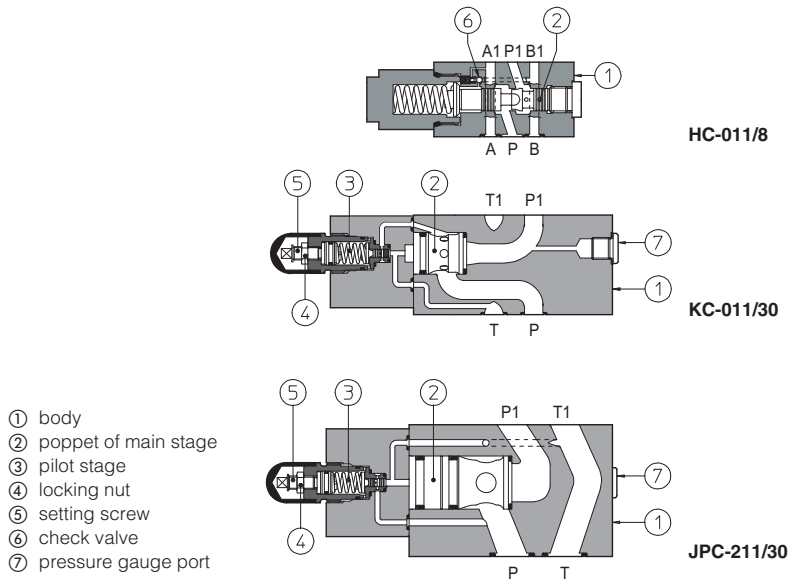
Modular pressure compensators type HC, KC, and JPC-2

ISO 4401 sizes 06, 10 and 16



① body
② poppet of main stage
③ pilot stage
④ locking nut
⑤ setting screw
⑥ check valve
⑦ pressure gauge port

HC, **KC** and **JPC** are two way pressure compensators for modular assembling with on/off and proportional directional control valves.

They keep a constant differential pressure (Δp) across port P and port A or B in order to maintain a constant flow rate against pressure variations. Automatic piloting selection ⑥ is included.

Fixed Δp is available only for size 06. Adjustment of desired Δp is operated by loosening the locking nut ④ and turning the setting screw ⑤ of pilot device.
Clockwise rotation increases Δp.

HC = size 06, flow up to 50 l/min.
KC = size 10, flow up to 100 l/min.
JPC = size 16, flow up to 200 l/min.

Mounting surface:
ISO 4401 size 06, 10, 16
Max pressure: **350 bar**

1 MODEL CODE

HC-0	-	11	/	30	/	M	**	/	*

Modular pressure compensator, size:
HC-0 = 06
KC-0 = 10 **(1)**
JPC-2 = 16

Configuration, see section 2
11 = two way execution with constant Δp beetween P port and user port

Fixed Δp (only for size 06):
8 = 8 bar

Adjustable Δp (for all sizes):
30 = 5 - 35 bar

Option (only for HC-011/30)
M = fit for manometer port P1

Series number

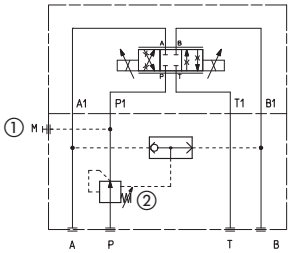
Seals material, see section 3:
- = NBR
PE = FKM
BT = HNBR

(1) To be used only with direct valve type DKZOR

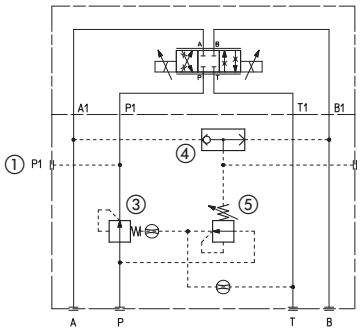
2 HYDRAULIC CHARACTERISTICS

Hydraulic configuration

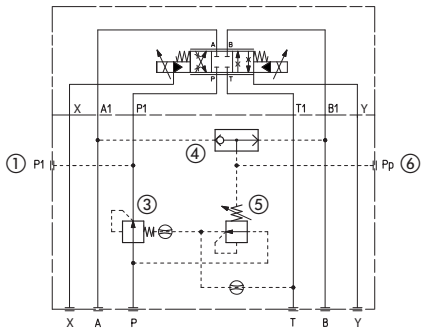
HC-011/8, HC-011/30



KC-011/30



JPC-211/30



① Pressure gauge port (not for HC-011/8)
② Settable (not for HC-011/8)
③ Two way compensator
④ Piloting selection
⑤ Adjustment of Δp on pilot device
⑥ Pilot port Pp

Valve model		HC-011/8	HC-011/30	KC-011/30	JPC-211/30
Max flow	[l/min]	50		100	200
Max inlet pressure	[bar]	350			
Regulating Δp (1)	[bar]	8	5 - 35	5 - 35	

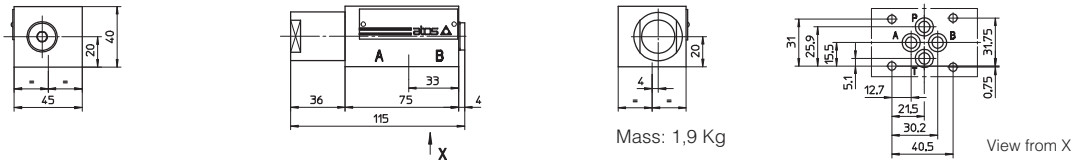
(1) The Δp for single flow path is fixed at 8 bar or is adjustable between 5 and 35 bar; it corresponds to values of total Δp across the valve of 16 bar or between 10 and 70 bar. Threaded plugged ports Pp and P1 are suitable for pressure adjustment or check of Δp value for single flow path (reading difference between Pp and P1 values).

3 MAIN CHARACTERISTICS, SEALS and HYDRAULIC FLUID - for other fluids not included in below table, consult our technical office

Assembly position / location	Any position		
Subplate surface finishing	Roughness index Ra 0,4 - flatness ratio 0,01/100 (ISO 1101)		
Compliance	RoHS Directive 2011/65/EU as last update by 2015/863/EU REACH Regulation (EC) n°1907/2006		
Ambient temperature	**Standard** = -30°C ÷ +80°C **/PE** option = -20°C ÷ +70°C **/BT** option = -40°C ÷ +70°C		
Seals, recommended fluid temperature	NBR seals (standard) = -20°C ÷ +60°C, with HFC hydraulic fluids = -20°C ÷ +50°C FKM seals (/PE option)= -20°C ÷ +80°C HNBR seals (/BT option)= -40°C ÷ +60°C, with HFC hydraulic fluids = -40°C ÷ +50°C		
Recommended viscosity	15÷100 mm²/s - max allowed range 2.8 ÷ 500 mm²/s		
Max fluid contamination level	ISO4406 class 20/18/15 NAS1638 class 9, see also filter section at www.atos.com or KTF catalog		
Hydraulic fluid	**Suitable seals type**	**Classification**	**Ref. Standard**
Mineral oils	NBR, FKM, HNBR	HL, HLP, HLPD, HVLP, HVLPD	DIN 51524
Flame resistant without water	FKM	HFDU, HFDR	ISO 12922
Flame resistant with water	NBR, HNBR	HFC	

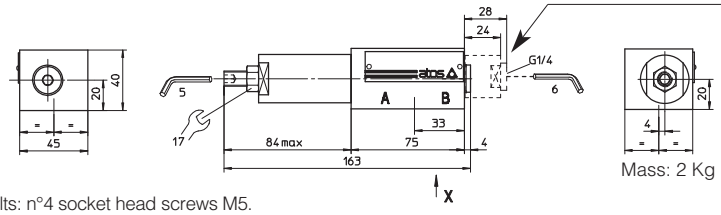
4 INSTALLATION DIMENSIONS [mm]

HC-011/8



P1 (Pressure gauge port)

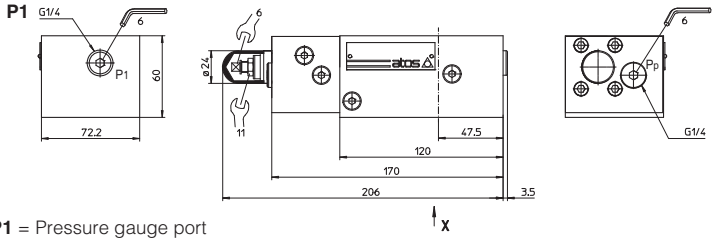
HC-011/30



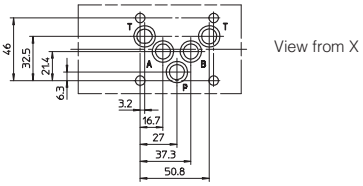
Fastening bolts: n°4 socket head screws M5.
The lenght depends on number and type of modular elements associated.

ISO 4401: 2005
Mounting surface: 4401-03-02-0-05
Diameter of ports
A, B, P, T: Ø = 7,5 mm (max)
Seals: 4 OR 108

KC



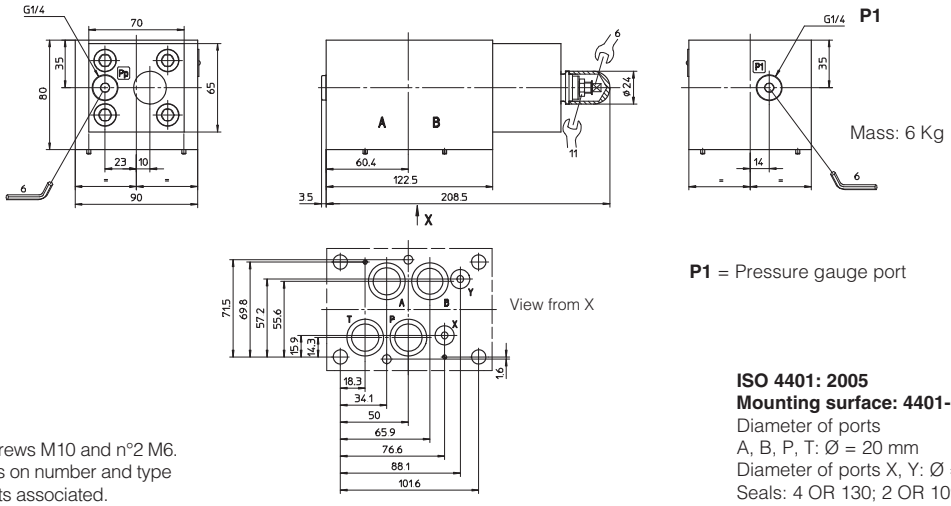
P1 = Pressure gauge port



Fastening bolts: n°4 socket head screws M6.
The lenght depends on number and type of modular elements associated.

ISO 4401: 2005
Mounting surface: 4401-05-04-0-05
Diameter of ports
A, B, P, T: Ø = 11,2 mm (max)
Seals: 2 OR 108, 5 OR 2050

JPC



P1 = Pressure gauge port

Fastening bolts:
n°4 socket head screws M10 and n°2 M6.
The lenght depends on number and type
of modular elements associated.

ISO 4401: 2005
Mounting surface: 4401-07-07-0-05
Diameter of ports
A, B, P, T: Ø = 20 mm
Diameter of ports X, Y: Ø = 7 mm
Seals: 4 OR 130; 2 OR 109